

## COMMENTS ON ELK HILLS POWER AUGUST 2012 RESPONSE TO MARCH 2012 EPA RFI

**1. Summary Section, page 4, Formation Testing Program:** Response is acceptable, but copies of the fall-off test (FOT) reports were not included in the updated permit application. The most recent FOT should be presented and discussed in Attachment I. Please provide that information and include a copy of the most recent FOT report in the updated application.

**2. Summary Section, page 5, Plugging and Abandonment Program and Results:** Response is acceptable, but please provide schematics of the proposed plugging and abandonment plan of the three wells, including depths of the cement plugs, injection zone, and underground sources of drinking water (USDWs), if present.

**3a. Summary Section, Wells within the Area of Review, pages 9 and 10:** Response is acceptable.

**3b. Attachment D, Documentation of the aquifer exemption for the Tulare Formation:** The Tulare Formation in the Elk Hills field is not an exempt aquifer. Please provide a request for an exemption.

**4. Attachment F, Lithology of the Confining Interval and Lithology of the Injection Interval:** Permeability data from fall-off testing is added to the discussion as requested. The lowest permeability from the most recent FOT data in 2011 is 1,419 millidarcies (md) rather than 1,695 md as reported in the discussion of Tulare Zone Lithology on page 19. Please correct the lowest permeability value accordingly. The depths to the top and bottom of the Tulare injection zones in the 25-18G and 35-18G wells are not provided and there is no discussion of the Tulare Formation porosity data based on well logs run in those wells. Please add a discussion of those data to the Attachment F and update the geologic maps and cross sections based on the data obtained in the four newly drilled injection wells. Elk Hills Power (EHP) states that wireline logs were not run in the 25A-18G and 35A-18G wells. Please provide any other logs of those wells in the updated application.

**5. Attachment I, page 30-3:** Response is acceptable, but the results of the most recent FOT should be added to the tables.

**6. Attachment I, page 32, 4<sup>th</sup> paragraph, 4<sup>th</sup> sentence, minor comment:** Response is acceptable.

**7. Attachment I, page 33, Well # 35-18G:** Response is acceptable

**8. Attachment Q, Plugging and Abandonment Plan:** Response is acceptable except for a typo in EPA Form 7520-14 for Well 35-18G and the omission of contingency costs in the third party plugging and abandonment (P&A) cost estimate. The typo is placement of the hole size in the space for the calculated top of the cement plug. Please correct the typo and add contingency costs and the increase due to inflation since 2012 to the P&A cost estimates for each well.

**9. Attachment R, Necessary Resources:** Response is subject to EPA review after the addition of contingency costs and inflation since 2012 as discussed in Comment 8, above.

**10. Attachment S, Aquifer Exemptions:** Please refer to Comment 3b, above.

**COMMENTS ON ELK HILLS POWER RESPONSE TO EPA COMMENTS AT THE MAY 8, 2012  
CONFERENCE CALL**

- 1. Summary, page 1, paragraph 5, sentence 3, a:** Response is acceptable.
- 2. Attachment M, page 40, Procedures, a:** Response is acceptable.
- 3. Attachment Q, page 45, Plugging and Abandonment Program, paragraph 1, sentence 3, a:** Response is acceptable.
- 4. Exhibit Q-3, a and b:** Response is acceptable.
- 5. Exhibit Q-4, a, Plugging and abandonment cost estimates:** Refer to Comments 8 and 9 above.
- 6. Exhibit R-1, page 1, a:** Response is acceptable since one of the four injection wells has been plugged and abandoned. However, the total estimated P&A cost should be adjusted as described in above.
- 7. Attachments D and S, Tulare Aquifer Exemption, a and b:** Refer to Comments above.